

BRUHAT BANGALORE MAHANAGARA PALIKE

Electrical Division in DASARAHALLI Zone.

Name of Work:- Providing Lighting for walking path in Bagalagunte Lake

Rs.26.00 Lakhs

Sl No	SR Page & SL No	Description Of Work	Unit	Qty	Rate	Amount
1	46 CSR 2023-24 11.8.3	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/Lumileds/Osram make LED Source. LED Streetlight 70W	Each	62	5992.00	371504.00
2	11 CSR 2023-24 4.2.5	Fabricating, supplying and erection of 7 ms long hot dip Galvanized Octagonal hot dip Pole with BSEN 10025 grade S355JO steel plate for shaft, IS2062 for base plate with door opening arrangements, including suitable boards, Bakelite sheet and MCBs as per IS specifications suitable to withstand the wind speed of 47m/s for 7.m Pole in single section and single joint welded as per IS 9595/IS10178AWS having dimensions bottom.....mm, top.....mm with 3mm thick, suitable base plate and 4Nosof..... long Jbolts along with template and the Pole shall be hot dip galvanized in single dipping with not less than 65micron as per ASTM-A123 and 153etc., (excluding foundation) as per drawing appended. 7 m - Top 70 mm and Bottom 130 mm dia	Each	62	13500.00	837000.00
3	13 CSR 2023-24 4.6.1	Supplying, and fixing of Hot dip Galvanized M.S.Bracket suitable for out door luminaries and mounted on Octagonal pole using necessary bolts, nuts etc., complete Single Arm Bracket with 1000 mm Standard 40/50 mm dia	Each	62	1700.00	105400.00
4	45 CSR 2023-24 13.6	Fixing charges of post top/ Gate/ Garden fitting /LED on the existing CI/ GI or any other pipe using required size of reducer, wiring using suitable wires.	Each	62	198.00	12276.00
5	21 CSR 2023-24 5.47	Supplying and fixing Microprocessor based Electronic timer (without contactor, Din Mounting using necessary bolts, nuts and washers etc., 3-120sec setting.	Each	2	2315.00	4630.00
6	18 CSR 2023-24 5.18.9	Supplying & fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring asrequired confirming to IEC 60898.50-63 A TPN	Each	4	3088.00	12352.00
7	16 CSR 2023-24 5.14.6	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947. 95/100 A	Each	2	16606.00	33212.00
8	20 CSR 2023-24 5.42.2	FabricatingsupplyingandmountingMSboxmadeout....SWGsuitablefor floor/wallmounting,fullyweatherproofwithprovisionforbetterheatdissipation,providedwithhingedfrontcover,equippedwithtamperprooflockingarrangements,withsuitablesizeclampswithnecessarycableentrypipewitheglandandboxshouldbefinishedwith7kntreatmentwithpowdercoatedpaintand finally finished with approved colour etc., complete 16 SWG	cm2	65000	0.43	27950.00

9	9	CSR 2023-24 3.9	Supplying and fixing hylium plastic sheet 3mm thick with necessary nitches for fixing switches, regulators etc., and fixing on existing wood or metal box using N. F. screws	cm2	12600	0.35	4410.00
10	20	CSR 2023-24 5.41.1	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron, and M.S. Flat.....with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. 40 x 40 x 6 mm	Mtr	12	305.00	3660.00
11	20	CSR 2023-24 5.40.1	Supplying A rated 3phase with neutral bus bar using required capacity electrolytic aluminium strips covered with heat shrinkable coloured PVC sleeve, mounted on phenolic/FRP/DMC insulator which are mounted on powder coated 40x60mm M.S.flat frame work in existing panel board. The bus bar shall have suitable holes for termination of incoming and outgoing cables as per IS specification with necessary bolts, nuts and washers etc, complete 100 A 4 x 30 x 6 mm Aluminium Strips	Mtrs	1	2465.00	2465.00
12	21	CSR 2023-24 371/48.01	1.1 kV Class HIR (Heat Resistant) PVC Insulated & Sheathed Aluminium Single Core Lead wires as per IS-694: 2010 PVC Wire - 2.5 Sqmm Weight per 100 Mtr Coil: 1.8 Kg	COIL	6	1484.00	8904.00
13	19	CSR 2023-24 5.38	Supplying and fixing of LED type panel board indicating lamp with required colour suitable for 230/440V/AC. 50 Hz 12/24V D.C.	Each	6	515.00	3090.00
14	54	CSR 2023-24 12.56	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipments on the meter board using 40 mm dia. 90 mm thick GI pipe 2.5m long buried in a pit. The pit should be filled with equal proportion of salt and charcoal 150 mm all-round the pipe to complete depth. The connection from the pipe to the conduiter, is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12 mm dia bolts, nuts, washers and check nut etc, the pipe shall have 16 through holes of 12 mm dia	No	2	3510.00	7020.00
15	13	CSR 2023-24 201/32.05	1.1 kV, XLPE or Heat resistant PVC insulated, PVC extruded Inner Sheath Armoured LTUG Cable as per IS-1554 (Part-1) or IS-7098 Part 1, Armoured strip thickness and resistivity as per IS-3975 16 Sqmm, 4 Core, (11 GI Strips - 4 x 0.8 mm)	KM	1.2	141842.00	170210.40
16	13	CSR 2023-24 204/32.08	1.1 kV, XLPE or Heat resistant PVC insulated, PVC extruded Inner Sheath Armoured LTUG Cable as per IS-1554 (Part 1) or IS-7098 Part-1, Armoured strip thickness and resistivity as per IS-3975. 25 Sqmm, 4 Core, (13 GI Strips - 4 x 0.8 mm)	KM	0.25	179844.00	44961.00
17	52	CSR 2023-24 174/21.05	Laying of cable in Existing Trench/GI pipe/Stone Ware/RCC Hume pipe using Wooden/Aluminium Rollers as directed by the departmental staff L1' CABLE 2.5 to 25 Sqmm	KM	1.45	20886.00	30284.70
18	6	Vol-1 KPWD SR 2023-24 1.6.1	Earth work excavation for pipelines/cables by Manual means upto 600 mm trench width, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, including dressing of excavated surfaces, disposing off or leveling the excavated earth or filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering and lift apparatuses required to complete the work. 1.6.1) In all kinds of soils. Depth upto 1.50m Basic rate Rs.484.00 Area weightage @10%= 48.40	m³	283.8	532.40	151095.12
19	5	Vol-1 KPWD SR 2023-24 1.4.2	Earth work excavation by manual means for drains, canals, waste weir, draft, approach channels, key trenches, foundation of Buildings & bridges and such similar works in all kinds of soils, as per drawings and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides early dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other apparatuses required to complete the work. 1.4.2) Depth exceeding 1.5m, but not exceeding 3 m Basic Rate: Rs. 259.00 Area weightage @10%=25.9	m³	80.6	284.90	22962.94

1 KPWD SR 2023-24 2.11	Supplying, fitting and placing TMT FE 550 / 550D Steel reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, lapping and other joints, operations complete as per drawing and technical specification. All other type of structures Basic rate Rs. 79011.00 Area weightage @10% = +7901.1	1.13708	86912.10	98826.01
Vol-1 KPWD SR 2023-24 2.3.1	Providing and laying in Cement Concrete for all Basement & surface level works, return walls, retaining walls, sunken floors etc. The granite/trap/ basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with vibrator, plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates Basic rate Rs. 6323.00 Area weightage @10% = 632.30	m ³ 33.48	6955.30	232863.44
	SUB Total			2185076.615
	GST @18%			393313.79
	Bescom charges			21609.59
	Grand total			2600000.00

CERTIFICATE:
1. The place was inspected and the work is essential.

2. The provision made in the estimate are adequate and necessary and the work comes in the BBMP limit and is legitimate Charges on the BBMP funds
3. The estimate is based on PWD Ele SR 2-23-24, KPWD (Ele) Common S. R 2023-24 and KPWD (Ele) Common SR-2023-24

AE/ Jt. Engineer (Ele)

Executive Engineer (Ele)
Dasarahalli Division

Asst. Exe. Engineer (Ele)
Dasarahalli Division